

# YAC/BAC contig covering the *FRI* locus

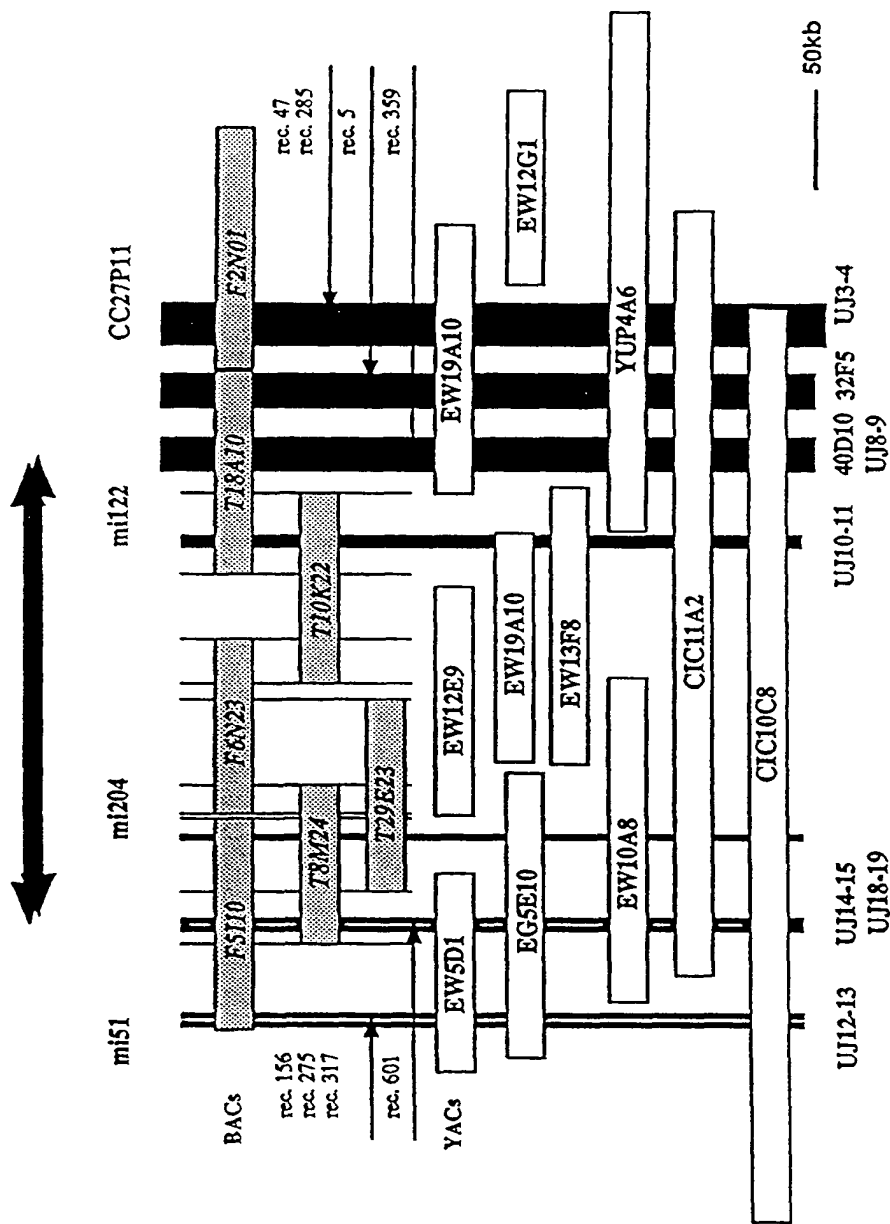
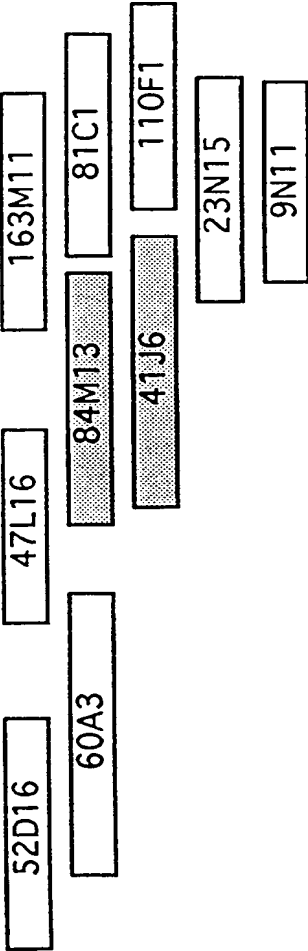


Fig 1

Cosmid contig covering *FRI*



complementing cosmid

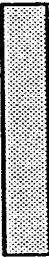


Fig 2

# Subclones of 84M13 and FN mutations

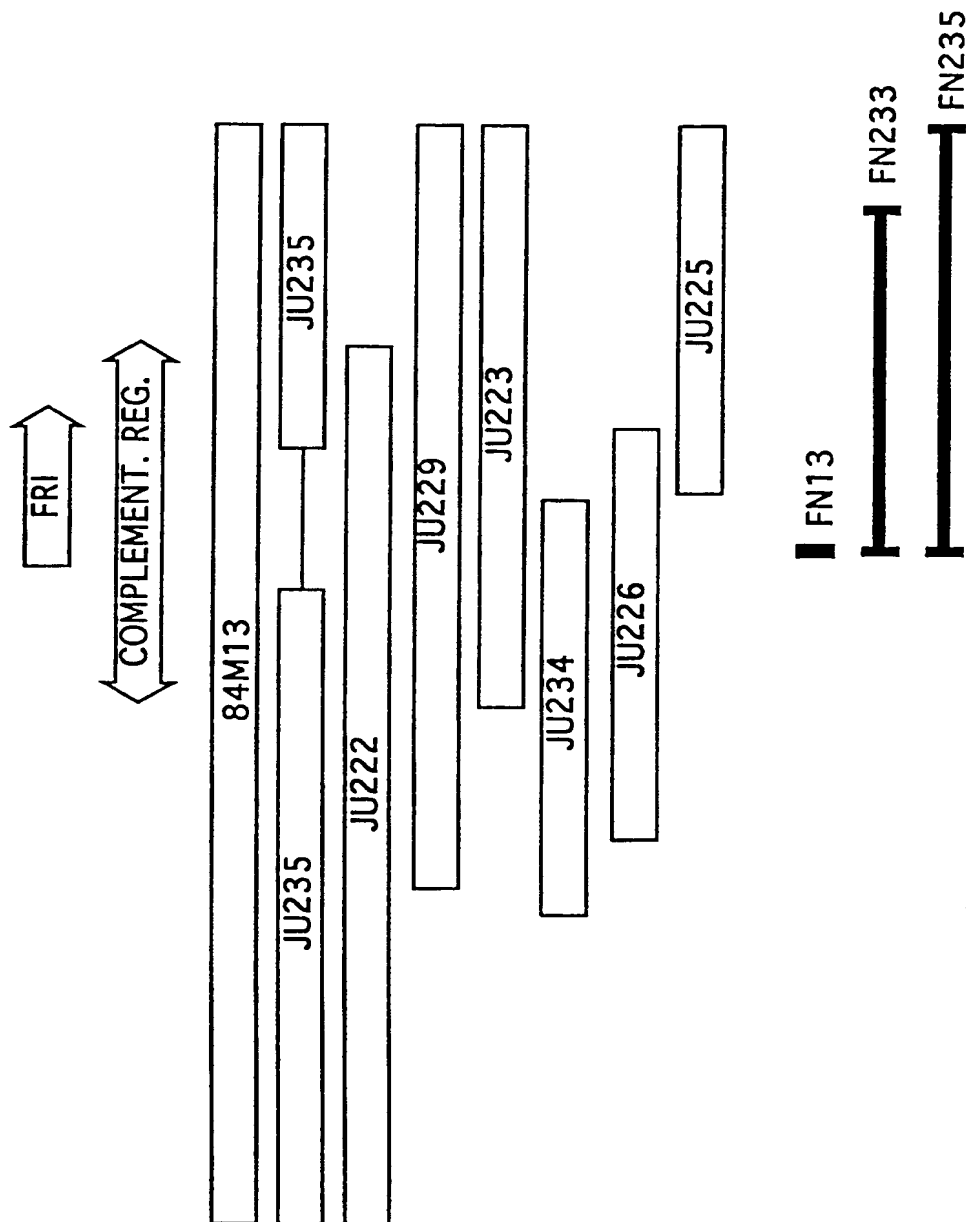


Fig 3

1	AGTACTCACACA	AGTCACAACCT	TAAACCAAGT	ACACAAGGAT	TTTATCATGG
51	GATTATCGTG	TTTGAAGACT	AAAAAGAGCA	CACCATCACC	CCCATTAGTG
101	CAGGTAGAGT	AAGACAGTAA	CTTTTGGGTT	CATATTACCG	AGCAAGAACC
151	GTTATTTGTG	ATTAGACATG	TTATAAACCA	CTGCTTTAGT	GACTATTTAA
201	AACAATATAT	TACATGTCGT	AATCATGCAA	CCTAACTATG	TTTTCATTA
251	TCAAATACAA	AGAATAAAGA	GAAAAGTGCG	TAGATTCAAT	TATTTGGCAT
301	AGACTCAAAA	GAGTGTATAT	ATATCTGACT	TTTATTAAAT	TATTAAACAC
351	AAATACATAT	TTTCATAAGC	AAAACCTATA	AAGCCCTAAA	CATATAATGA
401	TTACCTCAAA	GGAAAAAGTC	GTTTTCTCCT	ACTTAAAAGA	TAGGTTACTT
451	CCTAATTAAT	ATATAATTTA	TGTGAACTTC	ACAATATACA	GTTCAATAAA
501	ATTTGGTAAT	TTGACCGATT	TAAGGAGAGT	GGAAATTAGG	GCTTCTGCAA
551	TCTTTTTTCT	TCGCCGCAAT	CTCATGTCCA	ATTATCCACC	GACGGTGGCG
601	GCGCAACCCA	CAACGACGGC	GAATCCACTG	CTGCAGCGAC	ATCAATCTGA
651	ACAGCGACGA	AGAGAATTAC	CGAAGATTGT	CGAAACAGAG	TCTACAAGTA
701	TGGACATTAC	GATCGGTCAA	TCTAAGCAGC	CTCAATTTTT	GAAATCCATA
751	GACGAATTAG	CTGCGTTTTT	AGTTGCAGTG	GAAACATTCA	AACGCCAATT
801	CGATGATCTT	CAGAAGCACA	TCGAGTCAAT	CGAAAACGCA	ATTGATTCCA
851	AACTCGAGAG	TAACGGCGTT	GTCCTCGCCG	CGCGGAACAA	TAATTTCCAT
901	CAGCCGATGT	TATCGCCTCC	GCGGAACAAT	GTATCTGTAG	AAACCACCGT
951	CACTGTGAGC	CAACCGTCTC	AGGAGATTGT	ACCGGAGACG	TCGAATAAAC
1001	CGGAGGGGGG	ACGTATGTGT	GAGTTGATGT	GTAGCAAAGG	TCTGCGTAAA
1051	TACATATACG	CGAATATCTC	TGATCAAGCT	AAGTTAATGG	AAGAGATTCC

Fig 4

1101 TTCAGCTTTG AAATTGGCCA AGGAGCCAGC GAAGTTTGTA TTGGATTGTA  
1151 TTGGCAAGTT TTA CT TACAA GGGCGTAGAG CATTTACTAA AGAGTCGCCT  
1201 ATGAGCTCTG CGAGACAAGT TTCGCTTCTT ATACTGGAGT CTTTCTTCT  
1251 AATGCCTGAT CGTGGTAAAG GGAAGGTGAA GATTGAGAGT TGGATTAAAG  
1301 ATGAGGCGGA GACGGCTGCT GTTGCTTGGA GGAAAAGGTT GATGACTGAA  
1351 GGAGGATTAG CTGCGGCTGA GAAAATGGAT GCAAGGGGTT TGCTTTTACT  
1401 AGTTGCTTGT TTTGGTGTTT CTTCAAACCT TAGGAGTACA GATTTGCTGG  
1451 ATTTGATAAG GATGAGTGGT TCGAATGAGA TTGCCGGTGC TTTGAAGCGG  
1501 TCACAGTTTC TTGTCCCTAT GGTCTCAGGT ACCATATTCT GTTCTCACTC  
1551 GGTGAATTTT ATTGCAAAGG TGGTTCCTTT TGTGACATC ATCGACCAAC  
1601 ATCAAGTTCC ATCTTTGTTT TTCGATAAGC TTGATGGTAT AAAGTAGGAG  
1651 AGCACATCAA ATATTTAGAG TGCAATGACT GATTGAGCCA AATCCTAGCT  
1701 AGAAATTAAT CTGGAAAGAA CTTGGAACCT TCAACCATAG GTTTTGGTAC  
1751 GAAATTGTTG CTTGTCAGAA CCAAATGATA GGCTATTGCC TTGAAATAGT  
1801 GTTCTTGTG GTTCCAATA TTGGAAGTTA AAATCGTATG ACTTAGCTGT  
1851 TGGATACTAA TTAAGCTTAA GCAATGCCAA CTCTAAGAAG TGGTACTTAC  
1901 ACAATATTCT ATTGGTCATA GGTATAGTTG AATCAAGTAT CAAGCGTGGA  
1951 ATGCATATTG AAGCTCTTGA GATGGTTTAT ACCTTTGGCA TGGAGGATAA  
2001 GTTTTCAGCT GCTCTAGTTC TAACCTCATT CTAAAGATG AGCAAGGAGT  
2051 CATTTGAGAG GGCAAAACGG AAAGCCCAGT CACCGCTGGC ATTTGTATGA  
2101 ACCCTTCCCT TGCACATTAT GTACCTTTAT GAACTCTTTA TCATCATCTG  
2151 AGTCTGACCA TTGATATATT TATTTCTCAA CAGAAAGAAG CGGCTACAAA  
2201 GCAGCTAGCT GTGTTATCAT CAGTTATGCA GTGTATGGAG ACTCACAAGT  
2251 TAGATCCTGC GAAAGAACTA CCAGGATGGC AGATCAAAGA GCAAATTGTT  
2301 AGCTTGAGAG AAGACACTCT TCAGCTCGAC AAAGAGATGG AAGAGAAAGC  
2351 AAGATCTCTC AGTTTAATGG AGGAAGCCGC ACTTGCCAAG AGAATGTATA  
2401 ACCAACAGAT AAAACGTCCA AGGTTGTCAC CCATGGAAAT GCCACCAGTA  
2451 ACTTCTTCAT CGTATTCTCC TATCTACCGT GATAGAAGCT TTCCTAGTCA

Fig 4 (cont)

2501 AAGAGACGAT GACCAAGATG AAATATCAGC TCTTGTGAGT AGTTACCTCG  
2551 GCCCGTCAAC ATCTTTTCCT CATCGCTCAA GAAGATCCCC GGAATATATG  
2601 GTTCCACTTC CACATGGTGG GTTAGGAAGA AGTGTATATG CATATGAACA  
2651 TCTGGCCCCA AATTCATACT CTCCAGGTCA CGGACATAGA CTTCATCGAC  
2701 AGTACTCTCC GTCTTTGGTT CACGGACAGA GACATCCACT ACAGTACTCT  
2751 CCTCCAATTC ATGGACAACA ACAGTTACCA TATGGTATAC AAAGGGTTTA  
2801 CAGACATTCA CCATCTGAAG AAAGATATTT GGGTTTATCC AATCAAAGGT  
2851 CTCCTCGCAG TAACTCATCA TTAGACCCCA AATAGGAGGA ATGTAAATTT  
2901 GTAACAAAGC TTTTGTGTTT TGCTTAAGTT AGTCATTTAT TTAAGTCCCA  
2951 ACAGTCTCAA AATTTAATTT AATGTTTGGG GCTTAAGAAT GCAAATTTTT  
3001 TTGCTCCTGT AATTGACATT TAAGATGCTA ATGTTATTGC TTCAGAGGTT  
3051 TTAGTCAACC TCAGATACAT CGATATCACT ATCTAAATAG ACCTCTGGCT  
3101 CTTGGTCATC TGGATTCTCT TCATCTTCTG TCTCTGTTCC TTCTTGTCT  
3151 CGTTGCACTG CTCGAGCAAT TGC GGATTCC AACCTTGTGC TTACAGTTTC  
3201 CCATGACACA AGCTTTTCCA TGAATGTATT TATGTCCGCC TTCTTATCTT  
3251 TCTTGAGGAA GATGAATTCA CCGAAGATCC AACTTGAGCT TGACAATCAA  
3301 TCAAATCCGA AACAGAAACA GAGCTTTTTG ACATCTTTGA TTTAGCAGTC  
3351 TTTGATCTTG AGGAATATCA ATGAACACTA GATACTCA CACTTGCAGG  
3401 CTTTAAACTG GATTTTAAAC ATGAATAGAA GCATTGATTC CATGGAATGT  
3451 GGTAAGTGAC ATAGCTGGAC TTCTTAAACA AATGTATGAA CGGGTAGGGT  
3501 TCATTACAAT GTAGTTATAC AGCACTGAGA TTTATGGAAG AAAAAAGGA  
3551 CACAGCTTTA GATATCTACA GAGAGACAAG AACACTAAAG ACAAGAGAAT  
3601 CATAAGTTCA GGAGTTCGTT AAAATGGCTC TATTCAAATC ACACATTGGC  
3651 ACAAGACCAC TAATAAGATA CCAAGTGGGA CAATCGAAAG AGAATAAGAG  
3701 ATAGCATATC AGAGAGAGAG AGAGATTTTT TGAGGAGGGA GAAGTTCGCC  
3751 GGAGGCTTCT G

Fig 4 (cont)

FIG 4 "S406360"

1 CATGTCGTAA TCATGCAACC TAACTATGTT TTCATTAATC AAATACAAAG  
51 AATAAAGAGA AAAGTGCCTA GATTCAATTA TTTGGCATAG ACTCAAAAGA  
101 GTGTATATAT ATCTGACTTT TATTAAATTA TTAAACACAA ATACATATTT  
151 TCATAAGCAA AACTATAAAA GCCCTAAACA TATAATGATT ACCTCAAAGG  
201 AAAAAGTCGT TTTCTCCTAC TTAAAAGATA GGTTACTTCC TAATTAATAT  
251 ATAATTTATG TGAACCTCAC AATATACAGT TCAATAAAAT TTGGTAATTT  
301 GACCGATTTA AGGAGAGTGG AAATTAGGGC TTCTGCAATC TTTTTTCTTC  
351 GCCGCAATCT CATGTCCAAT TATCCACCGA CGGTGGCGGC GCAACCCACA  
401 ACGACGGCGA ATCCACTGCT GCAGCGACAT CAATCTGAAC AGCGACGAAG  
451 AGAATTACCG AAGATTGTCTG AAACAGAGTC TACAAGTATG GACATTACGA  
501 TCGGTCAATC TAAGCAGCCT CAATTTTTGA AATCCATAGA CGAATTAGCT  
551 GCGTTTTTCAG TTGCAGTGGA AACATTCAAA CGCCAATTCTG ATGATCTTCA  
601 GAAGCACATC GAGTCAATCG AAAACGCAAT TGATTCCAAA CTCGAGAGTA  
651 ACGGCGTTGT CCTCGCCGCG CGGAACAATA ATTTCCATCA GCCGATGTGA  
701 TCGCCTCCGC GGAACAATGT ATCTGTAGAA ACCACCGTCA CTGTGAGCCA  
751 ACCGTCTCAG GAGATTGTAC CGGAGACGTC GAATAAACCG GAGGGGGGAC  
801 GTATGTGTGA GTTGATGTGT AGCAAAGGTC TGCGTAAATA CATATACGCG  
851 AATATCTCTG ATCAAGCTAA GTTAATGGAA GAGATTCCTT CAGCTTTGAA  
901 ATTGGCCAAG GAGCCAGCGA AGTTTGTATT GGATTGTATT GGCAAGTTTT  
951 ACTTACAAGG GCGTAGAGCA TTTACTAAAG AGTCGCCTAT GAGCTCTGCG  
1001 AGACAAGTTT CGCTTCTTAT ACTGGAGTCT TTTCTTCTAA TGCCTGATCG  
1051 TGGTAAAGGG AAGGTGAAGA TTGAGAGTTG GATTAAAGAT GAGGCGGAGA

Fig 5

09406604.1

1101 CGGCTGCTGT TGCTTGGAGG AAAAGGTTGA TGA CTGAAGG AGGATTAGCT  
1151 GCGGCTGAGA AAATGGATGC AAGGGGTTTG CTTT TACTAG TTGCTTGTTT  
1201 TGGTGTTCCT TCAAAC TTTA GGAGTACAGA TTTGCTGGAT TTGATAAGGA  
1251 TGAGTG GTTC GAATGAGATT GCCGGTGCTT TGAAGCGGTC ACAGTTTCTT  
1301 GTCCCTATGG TCTCAGGTAT AGTTGAATCA AGTATCAAGC GTGGAATGCA  
1351 TATTGAAGCT CTTGAGATGG TTTATACCTT TGGCATGGAG GATAAGTTTT  
1401 CAGCTGCTCT AGTTCTAACT TCATTCTTAA AGATGAGCAA GGAGTCATTT  
1451 GAGAGGGCAA AACGGAAAGC CCAGTCACCG CTGGCATTTA AAGAAGCGGC  
1501 TACAAAGCAG CTAGCTGTGT TATCATCAGT TATGCA GTGT ATGGAGACTC  
1551 ACAAGTTAGA TCCTGCGAAA GAACTACCAG GATGGCAGAT CAAAGAGCAA  
1601 ATTGTTAGCT TGGAGAAAGA CACTCTTCAG CTCGACAAAG AGATGGAAGA  
1651 GAAAGCAAGA TCTCTCAGTT TAATGGAGGA AGCCGCACTT GCCAAGAGAA  
1701 TGTATAACCA ACAGATAAAA CGTCCAAGGT TGTCACCCAT GGAAATGCCA  
1751 CCAGTAACTT CTTCATCGTA TTCTCCTATC TACCGTGATA GAAGCTTTCC  
1801 TAGTCAAAGA GACGATGACC AAGATGAAAT ATCAGCTCTT GTGAGTAGTT  
1851 ACCTCGGCCC GTCAACATCT TTTCCTCATC GCTCAAGAAG ATCCCCGGAA  
1901 TATATGGTTC CACTTCCACA TGGTGGGT TA GGAAGAAGTG TATATGCATA  
1951 TGAACATCTG GCCCCAAATT CATACTCTCC AGGTCACGGA CATAGACTTC  
2001 ATCGACAGTA CTCTCCGTCT TTGGTTCACG GACAGAGACA TCCACTACAG  
2051 TACTCTCCTC CAATTCATGG ACAACAACAG TTACCATATG GTATACAAAG  
2101 GGTTTACAGA CATTCAACAT CTGAAGAAAG ATATTTGGGT TTATCCAATC  
2151 AAAGGTCTCC TCGCAGTAAC TCATCATTAG ACCCCAAATA GGAGGAATGT  
2201 AAATTTGTAA CAAAGCTTTT TGTTTTTGCT TAAGTTAGTC ATTTATTTAA  
2251 CTCCCAA

Fig 5 (contd)



1 MSNYPPTVAA QPTTTANPLL QRHQSEQRRR ELPKIVETES TSMDITIGQS  
51 KQPQFLKSID ELAAFSVAVE TFKRQFDDLQ KHIESIENAI DSKLESNGVV  
101 LAARNNNFHQ PMLSPPRNNV SVETTVTVSQ PSQEIVPETS NKPEGGRMCE  
151 LMCSKGLRKY IYANISDQAK LMEEIPSALK LAKEPAKFVL DCIGKFYLQG  
201 RRAFTKESPM SSARQVSLLI LESFLLMPDR GKGKVKIESW IKDEAETAAV  
251 AWRKRLMTEG GLAAAEKMDA RGLLLLACF GVPSNFRSTD LLDLIRMSG  
301 NEIAGALKRS QFLVPMVSGI VESSIKRGMH IEALEMVYTF GMEDKFSAAL  
351 VLTSFLKMSK ESFERAKRKA QSPLAFKEA TKQLAVLSSV MQCMETHKLD  
401 PAKELPGWQI KEQIVSLEKD TLQLDKEMEE KARSLSLMEE AALAKRMYNQ  
451 QIKRPRLSPM EMPFVTSSSY SPIYRDRSFP SQRDDDQDEI SALVSSYLGP  
501 STSFPHRSRR SPEYMVPLPH GGLGRSVYAY EHLAPNSYSP GHGHRHLRQY  
551 SPSLVHGQRH PLQYSPPIHG QQQLPYGIQR VYRHSPSEER YLGLSNQRSP  
601 RSNSSLDPK

Fig 6

TABLE 3

33 ecotypes grouped after FT and PCR marker genotype  
 Flowering time scored as early/late or days to flowering

Ecotype	FT	Promoter	BsmFI(GRM)	+16 nt
Li-5	Early	+	-	-
Col	Early	+	-	-
En	Early	+	-	-
Ws	Early	+	-	-
Nd	Early	+	-	-
MT-0	54	+	-	-
Köln	54	+	-	-
Cvi	Early	+	+	+
Wil	Early	+	+	+
S96	Early	+	+	+
Est-0	Early	+	Het	Het
Shakhdara	47	+	+	+
KZ-9	64	+	+	+
PU-2-8	85	+	+	+
Ler	Early	-	+	+
TSU-0	57	-	+	+
Dijon	Intermed?	-	+	+
Gr	Intermed.	-	+	+
St	Late	+	+	+
Sf-2	Late	+	+	+
Te	Late	+	+	+
Ko	Late	+	+	+
Öst	Late	?	?	+
Can	Late	+	+	+
Vimmerby	137	+	+	+
Lisse	140	+	+	+
PU-2-3	153	+	+	+
GOT-32	179	+	+	+
Lund	180	+	+	+
TAMM-46	250	+	+	+
NC-6	188	+	-	+
DEM-4	223	+	-	+
Algutsum	251	+	-	+

Fig 7